

The diagram shows a matrix **A** (labeled 200) on the left, which is equal to the product of matrix **T** (labeled 202) and matrix **P** (labeled 204), plus matrix **E** (labeled 206). Matrix **A** is a square matrix with horizontal lines. Matrix **T** is a tall, narrow matrix with vertical lines. Matrix **P** is a wide, short matrix with horizontal lines. Matrix **E** is a square matrix with horizontal lines. The equation is represented as $A = T * P + E$.

$$\begin{array}{c} \boxed{} \\ \text{210} \end{array} a_n = \begin{array}{c} \boxed{t_n} \\ \text{212} \end{array} * \begin{array}{c} \boxed{P} \\ \text{214} \end{array} + \begin{array}{c} \boxed{e_n} \\ \text{216} \end{array}$$

Diagram 220 illustrates a transformation from a 2D matrix $D_{v,n}$ to a 1D vector. The matrix $D_{v,n}$ has dimensions n_v (vertical) by n_h (horizontal). An arrow points from the matrix to a horizontal bar representing a vector of size $n_v \cdot n_h$. The first element of the vector is labeled 1, and the last element is labeled $n_v \cdot n_h$.

Fig. 3

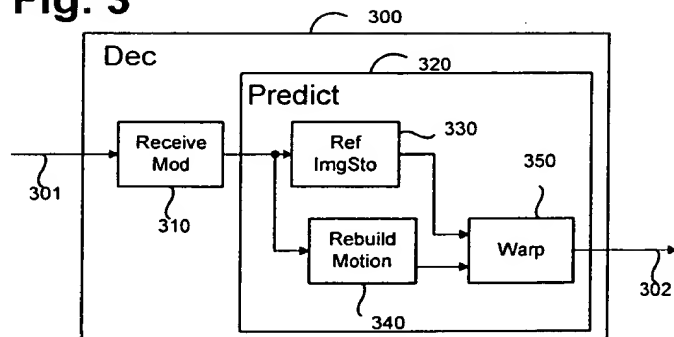


Fig. 4a

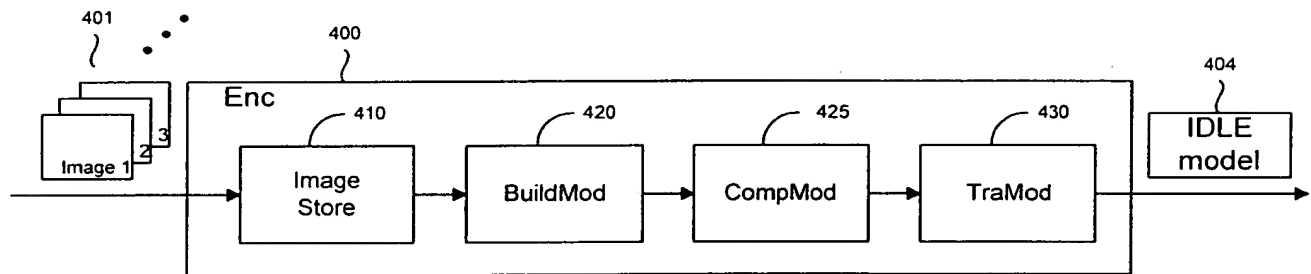


Fig. 4b

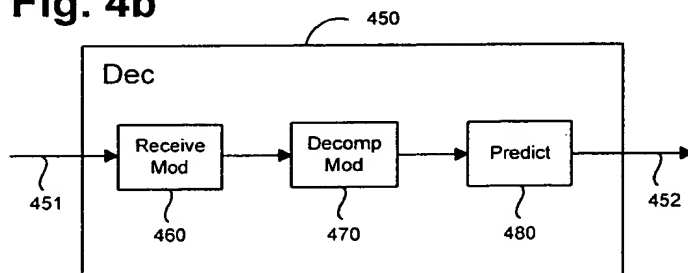


Fig. 5

The diagram illustrates the internal structure of the BuildMod module (500). An input signal 501 enters the module and is split at junction 510. One path leads to the Reflmg Sto block (520), and the other leads to the ME block (530). The Reflmg Sto block (520) outputs to the ME block (530). The ME block (530) outputs to the Update SSMod block (540). The Update SSMod block (540) is connected to the Store SSMod block (550) via a bidirectional arrow. The Store SSMod block (550) outputs to the Motion SSMod block (592). The Reflmg Sto block (520) also outputs to the Reflmg block (591). Both the Reflmg block (591) and the Motion SSMod block (592) output to the IDLE model block (593). The entire module is labeled BuildMod at the bottom left.

Fig. 6

600

620

640

610

630

650

Fig. 7

700

720 740 760

710 730 750

Fig. 8 a

The diagram illustrates the internal structure of the BuildMod module (800). An input signal 801 enters from the left and splits into two paths. One path goes through a multiplexer 810 to a Reflmg Sto block (812). The other path goes through a multiplexer 816 to a ME block (814). The Reflmg Sto block (812) outputs to the ME block (814). The ME block (814) outputs to a Warp block (816). The Warp block (816) outputs to a SumAbs Diff block (818). The SumAbs Diff block (818) outputs to a Build SSMOD block (820). The Build SSMOD block (820) outputs to a Motion SSMOD block (822). The Motion SSMOD block (822) outputs to an IDLE model block (823). Additionally, there is an EncCont block (819) at the top, which receives input from the Reflmg Sto block (812) and the ME block (814), and outputs to the Reflmg block (821). The Reflmg block (821) outputs to the IDLE model block (823).

Fig. 8 b

The diagram illustrates the internal structure of the BuildMod module (831). It features several interconnected blocks: a Reflmg Sto (834) that receives input from the EncCont (839) and outputs to the ME (835); the ME (835) which outputs to the Opposite Warp (836); the Opposite Warp (836) which outputs to the Build SSMOD (837) and the SumAbs Diff (838); the Build SSMOD (837) which outputs to the Motion SSMOD (842); the SumAbs Diff (838) which outputs to the Reflmg (841); and the Reflmg (841) which outputs to the IDLE model (843). The EncCont (839) is a central control block that manages the flow of data between the Reflmg Sto (834), the ME (835), the Opposite Warp (836), the SumAbs Diff (838), and the Reflmg (841). The IDLE model (843) is the final output of the BuildMod module.

Fig. 8 c

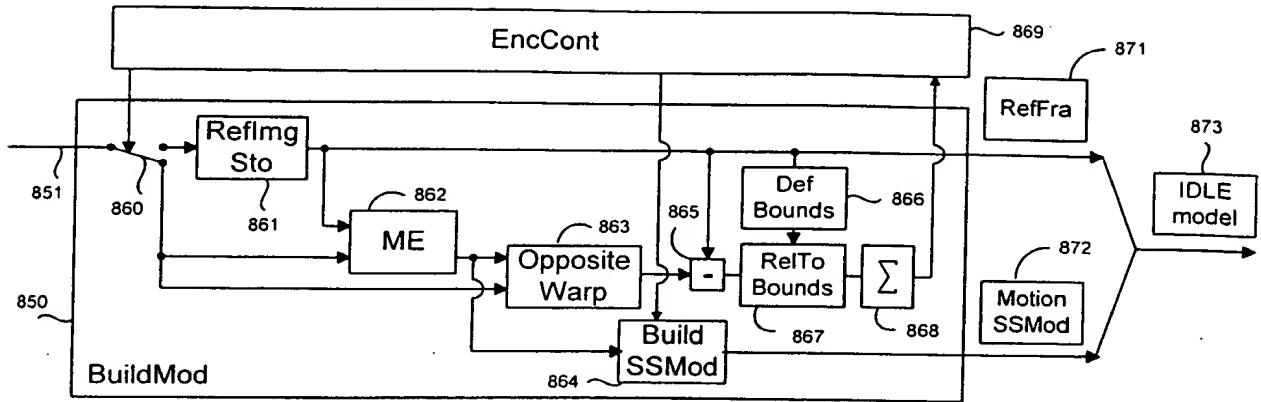


Fig. 8 d

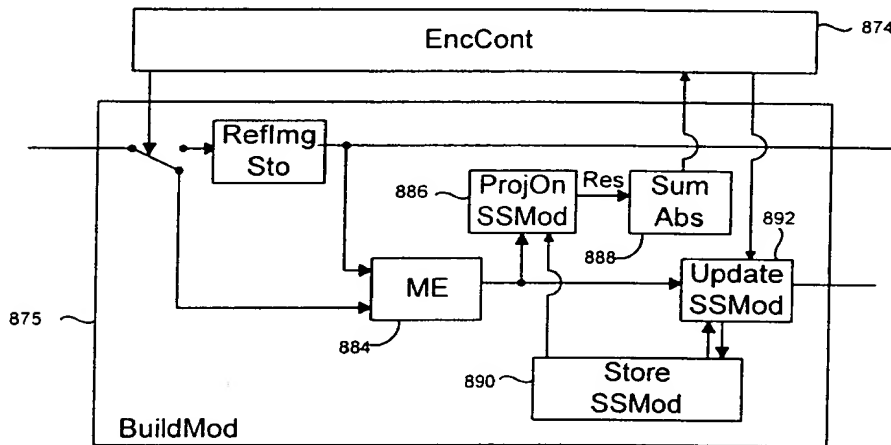


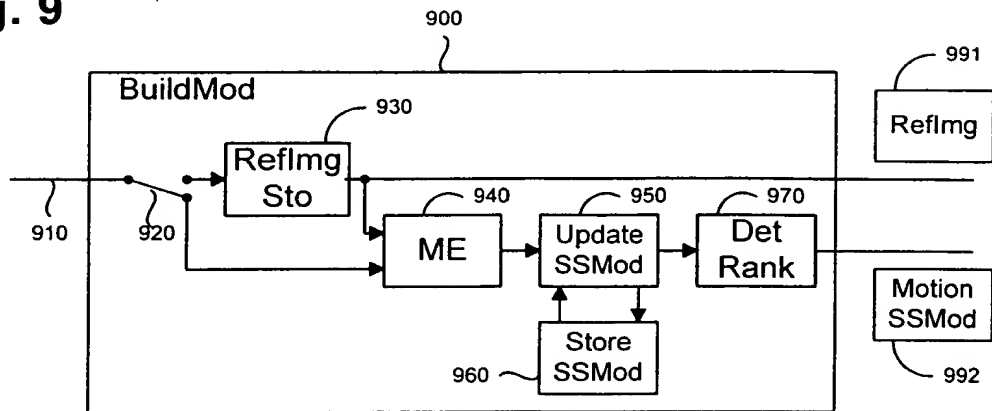
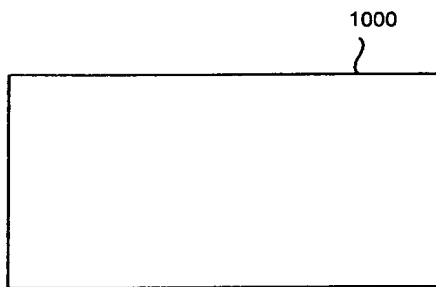
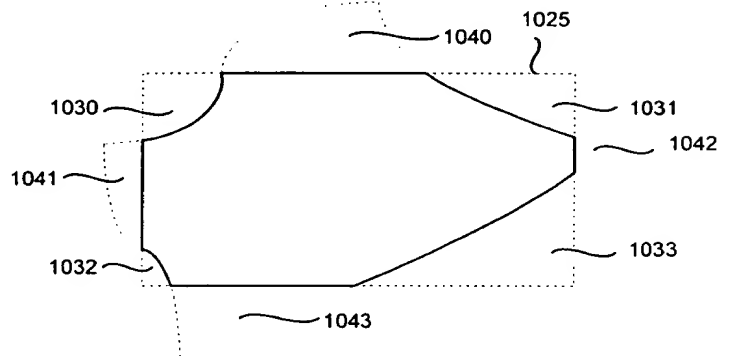
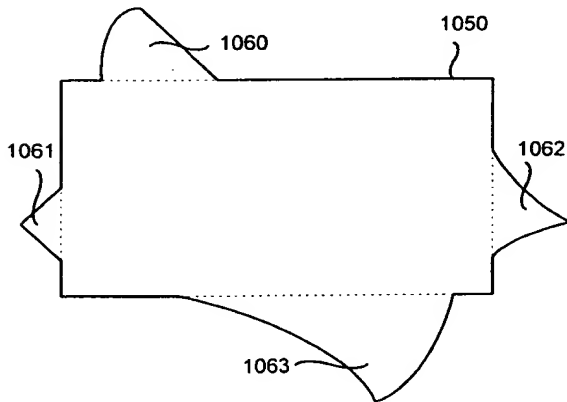
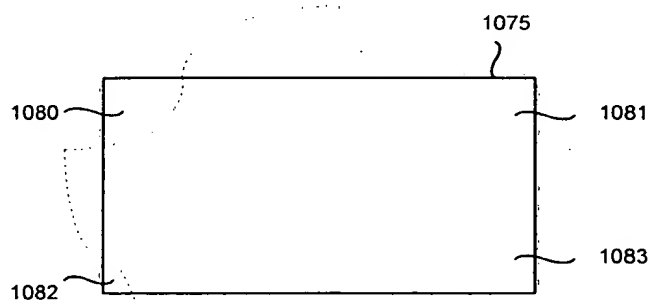
Fig. 9**Fig. 10 a****Fig. 10 b****Fig. 10 c****Fig. 10 d**

Fig. 11 a

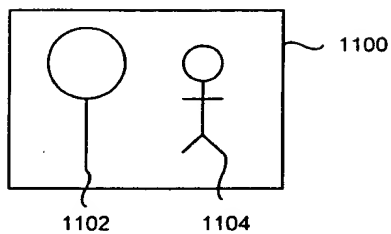


Fig. 11 b

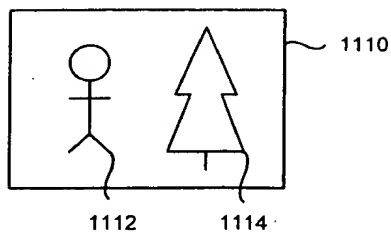


Fig. 11 c

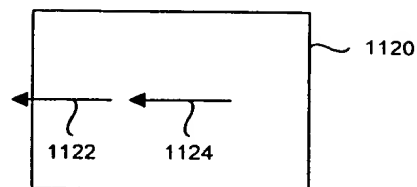


Fig. 11 d

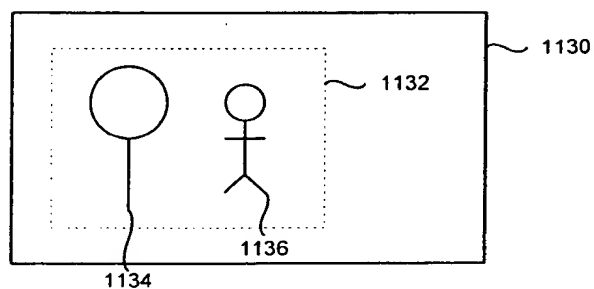


Fig. 11 e

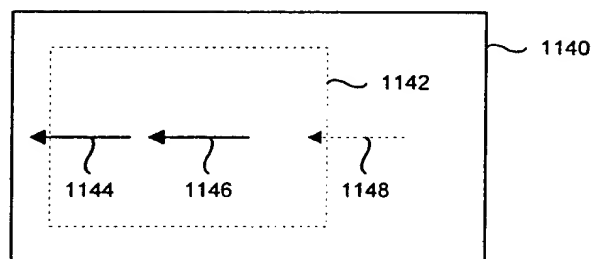


Fig. 11 f

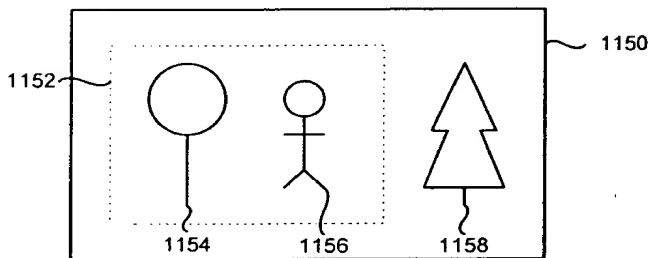


Fig. 11 g

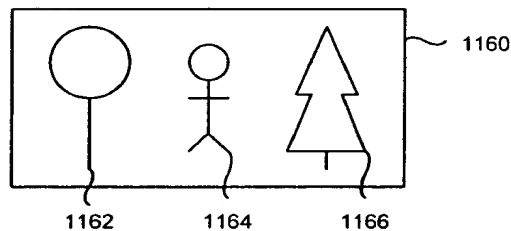


Fig. 11 h

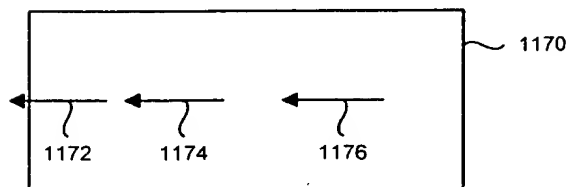


Diagram illustrating a sequence of 12 nucleotides (1210 to 1234) grouped into four sets of three (1210-1212, 1214-1216, 1218-1220, 1222-1224, 1226-1228, 1230-1232, 1234). The nucleotides are labeled with letters: 1210 (I), 1212 (U), 1214 (U), 1216 (U), 1218 (P), 1220 (U), 1222 (U), 1224 (U), 1226 (U), 1228 (P), 1230 (U), 1232 (U), 1234 (U). Arrows indicate transitions between codons: 1240 (from 1210-1212 to 1214-1216), 1250 (from 1214-1216 to 1218-1220), 1260 (from 1218-1220 to 1222-1224), and 1260 (from 1222-1224 to 1226-1228).

Diagram illustrating a vehicle 1300 equipped with a sensor 1305 (e.g., radar or lidar) mounted on the roof. A pedestrian 1315 is shown walking, carrying a bag 1310. The sensor 1305 is directed towards the pedestrian 1315.

Diagram illustrating a vehicle (1340) parked within a defined area (1330). A person (1335) stands near the rear of the vehicle, and a dog (1345) is positioned near the front of the vehicle.

Diagram illustrating a vehicle interior (1360) with a rearview mirror assembly (1370) mounted on the windshield. A driver (1365) is seated in the driver's seat, and a passenger (1375) is seated in the front passenger seat. The rearview mirror assembly (1370) is positioned to provide a view of the rear of the vehicle.

The diagram illustrates a neural network architecture for character recognition. It consists of a sequence of layers, each containing a set of vertical rectangular units. The units are labeled with numbers 1410 through 1428. The connections between layers are indicated by curved arrows. The top layer (1410-1428) is connected to a layer above it (1440-1450) and a layer below it (1445-1455). The connections are labeled with numbers 1440, 1445, 1450, and 1455. The units in the top layer are labeled with characters: U, U, I, U, B, B, P, B, B, B, I, B, B, B, P, U, U, U. The units in the bottom layer are labeled with characters: U, U, I, U, B, B, P, B, B, B, I, B, B, B, P, U, U, U.

Fig. 15 a

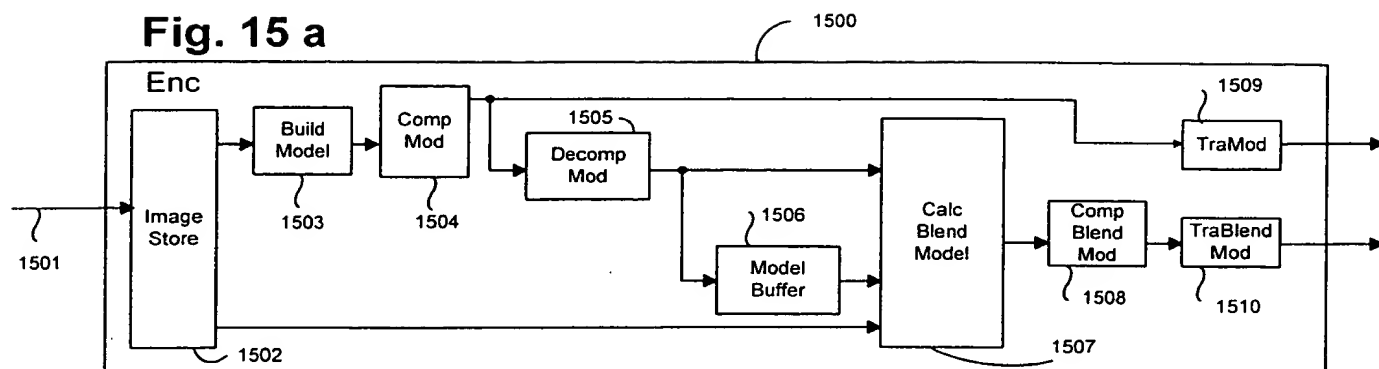


Fig. 15 b

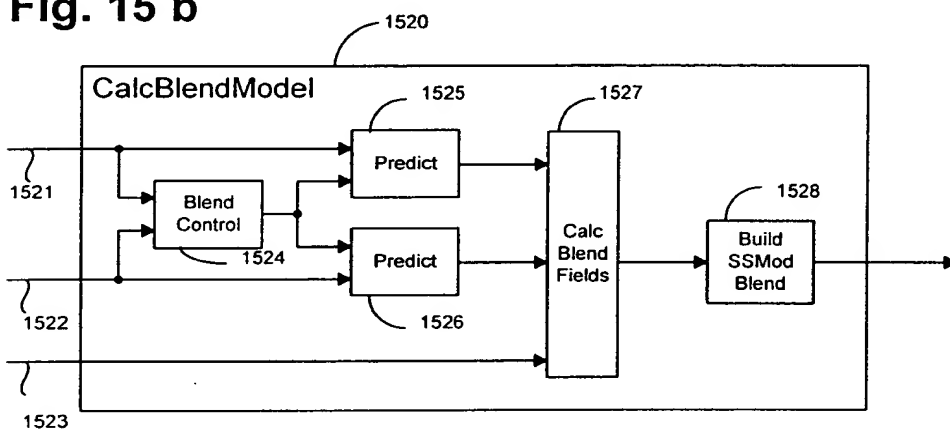


Fig. 15 c

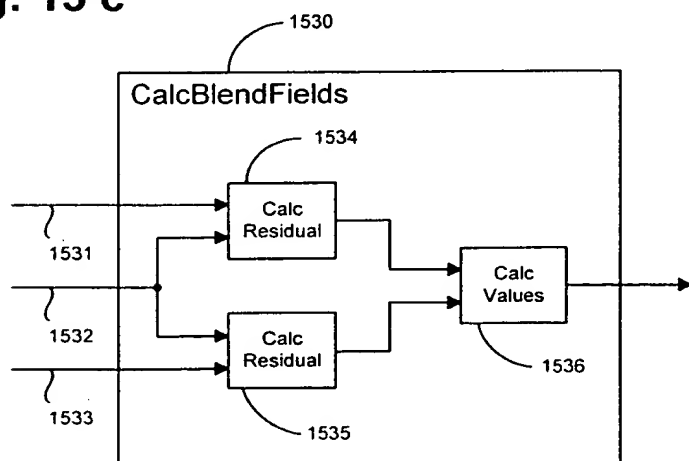


Fig. 16

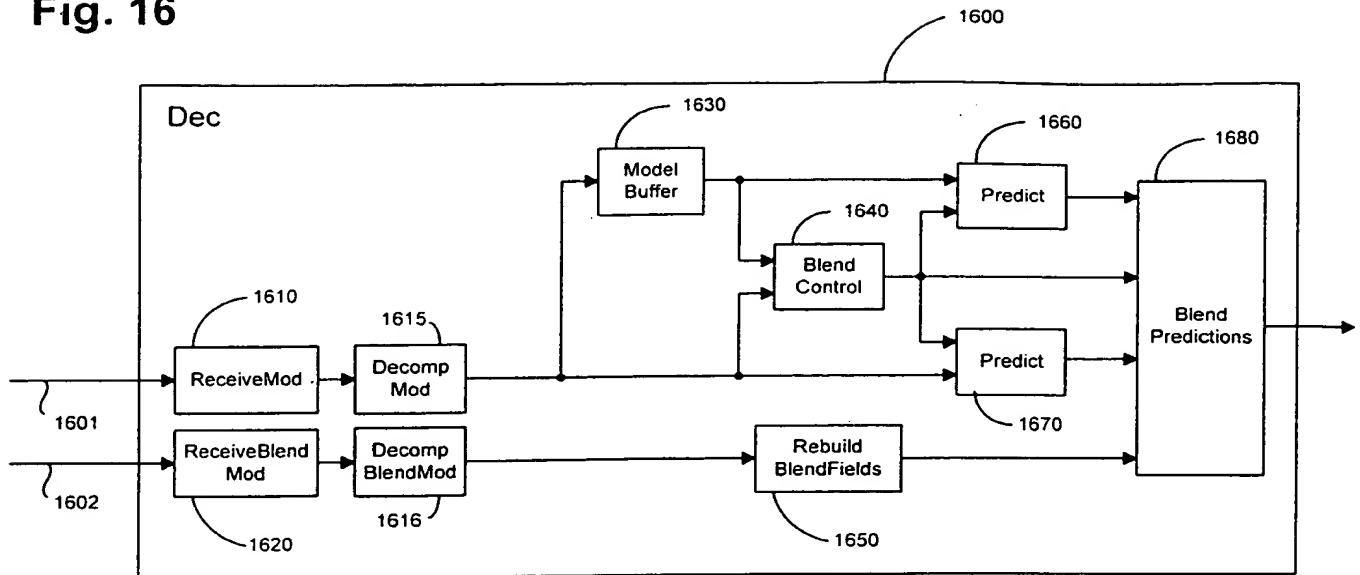


Fig. 17

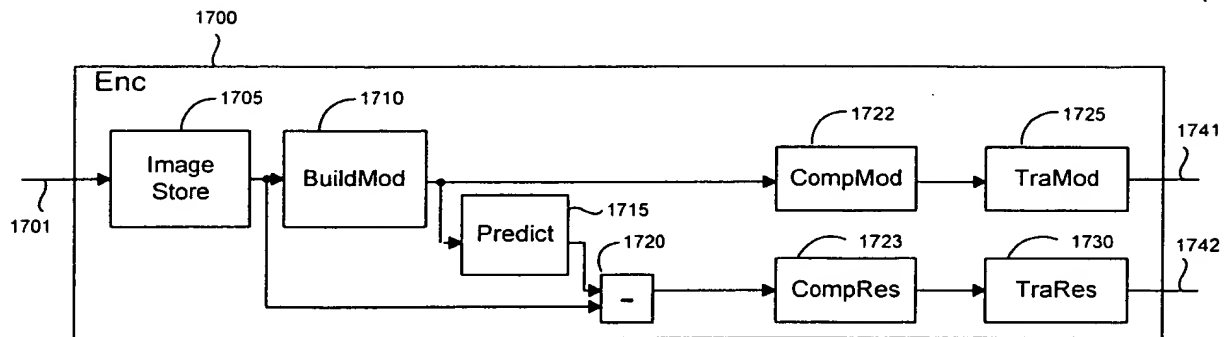


Fig. 18

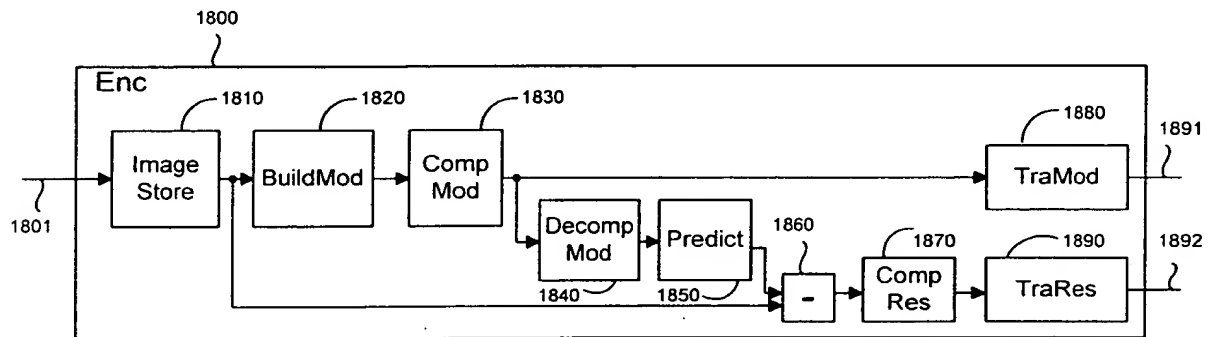


Fig. 19

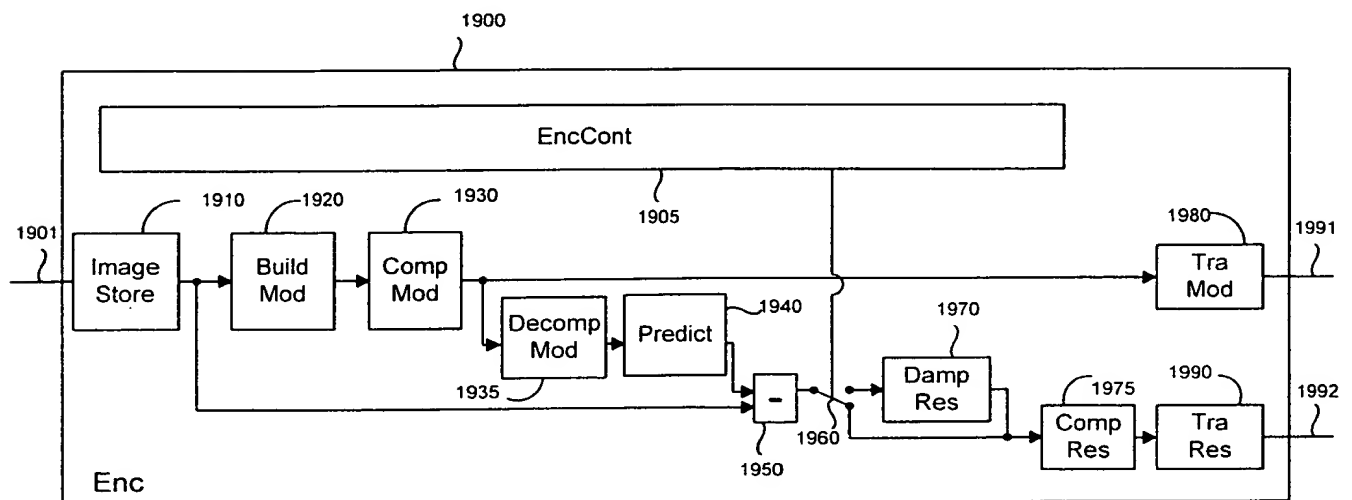


Fig. 20

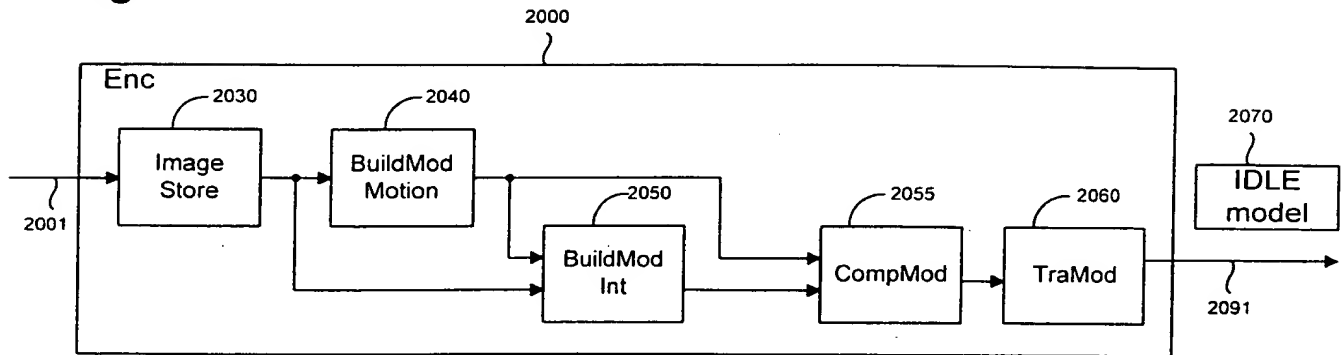


Fig. 21 a

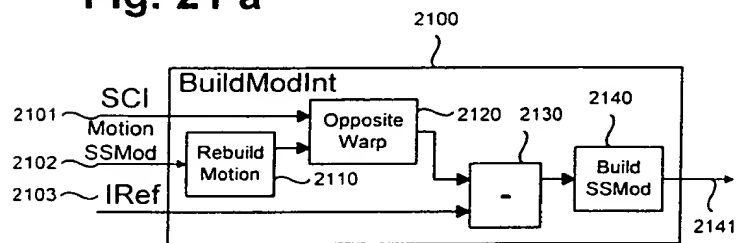


Fig. 21 b

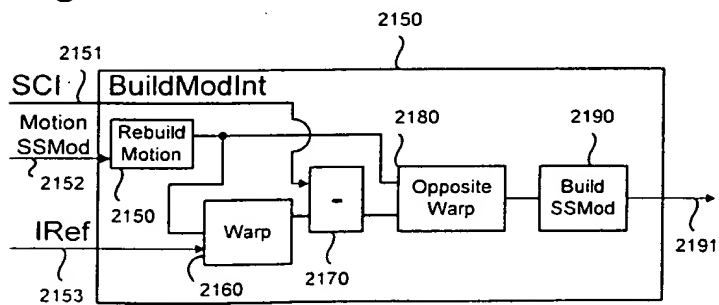


Fig. 22 a

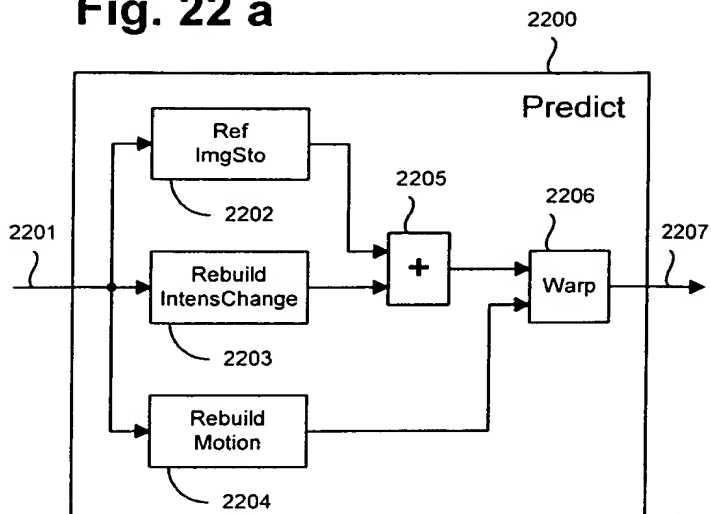


Fig. 22 b

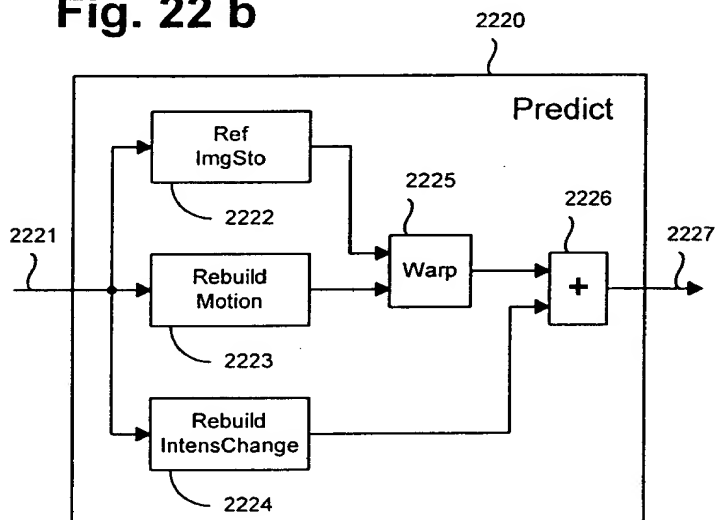


Fig. 23

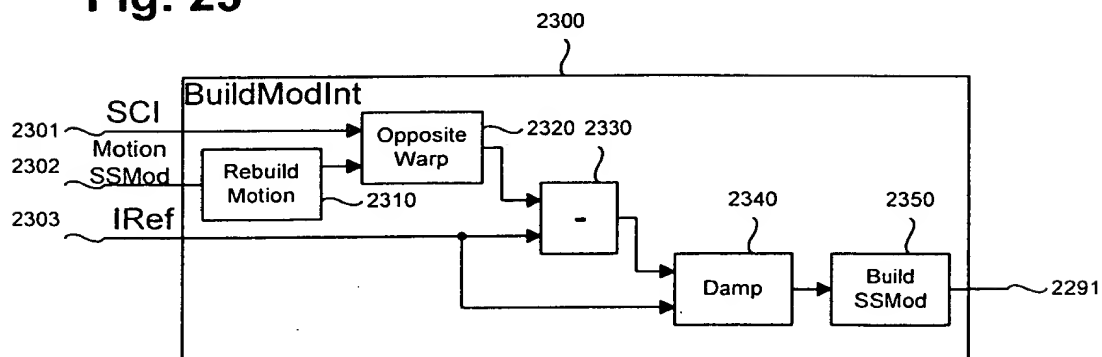


Fig. 24a

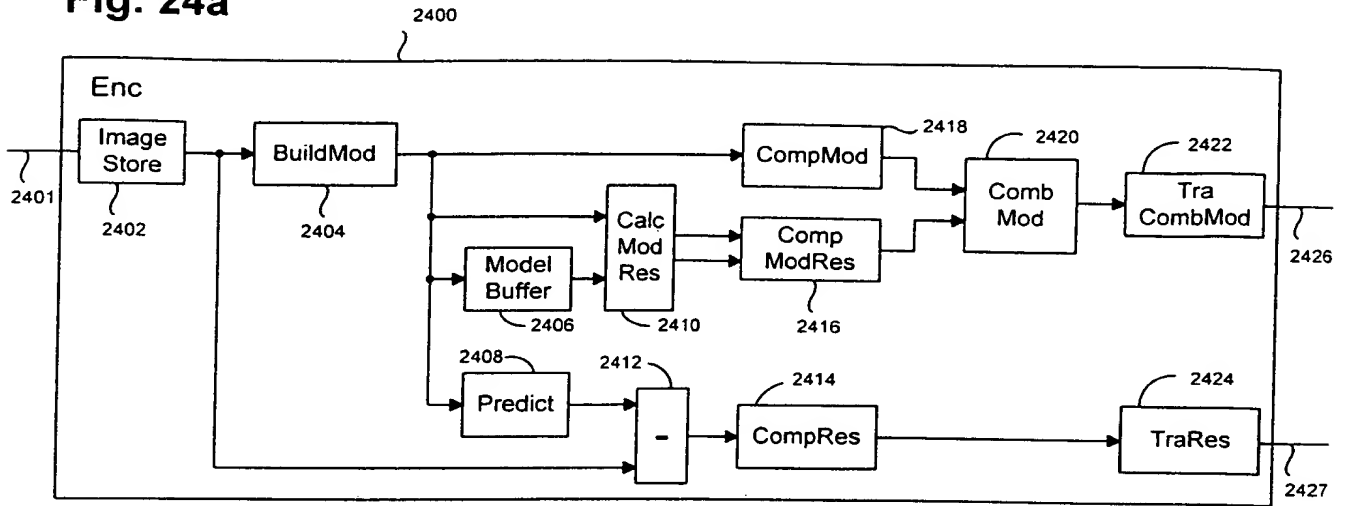


Fig. 24b

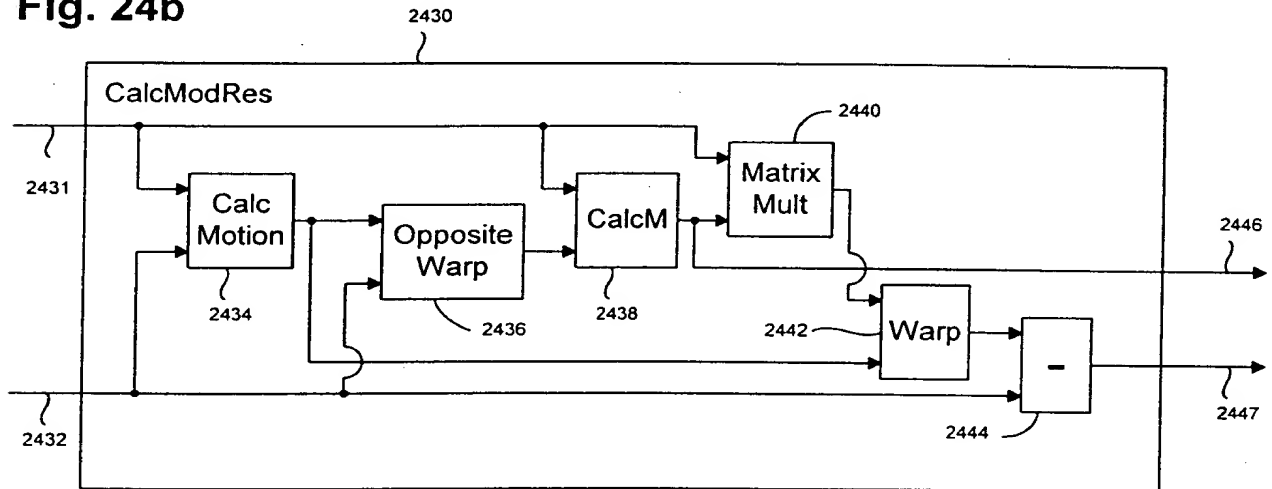


Fig. 24c

